

Work Order ID 67792



Page 1

Wednesday, March 30, 2011 11:35:37 AM

Item ID: D3510-041

Accept



Setup Start



Revision ID:

Item Name: Skidtube Insert Assembly

Stop



Start Date: 3/30/2011 Start Qty: 4.00

Required Date: 4/4/2011 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3510

Rev C

100

0.00



MORI SEIKI CNC LATHE LARGE

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

Turn as per Dwg D3510 & Folio FA652
Ensure that DT8877A Plug fits in tube.

MML 11/06/28

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

ML 11/06/28

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

0.00



HAAS CNC VERTICAL MACHINING #1

B.A 11/06/28

2 0

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA652 and Dwg D3510

~~11/06/20~~ 11/06/20

2-Deburr

Note:*.**** 250" dia holes are to opened to finish size by skidtube dept,and missing .266" dia hole is to be drilled by skid dept.*****

130

QC2- Inspect parts off machine FAI/FAIB

0.00



B.A 11/06/28

2 0

QC

Memo

0.00

Quality Control

140

QC8- Inspect parts - second check

0.00



11-06-29

2 0

QC

Memo

0.00

Quality Control

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



Skidtubes

Skidtubes

Memo

0.00

0.00

1-Drill .266" Dia hole using DT8877B as per Dwg D3510

2-Counter bore wearplate holes as per Dwg d3510.

3-open wearplate holes to .297 as per Dwg D3510.

4-Deburr

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

170



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

0.00

11-6-29

8/26/29

(42)

2 & 11-6-29

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

2 d 11/6/29

190

HandFinishing

0.00



HandFinish

Memo

0.00

Hand Finishing

Install inserts as per Dwg D3510

2 d 11/6/29

200

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sub 11/6/29

②

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Required Date: 4/4/2011	Req'd Qty: 4.00		Customer:		
Reference:					

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 Packaging	Identify as per dwg & Stock Location: _____	0.00							
Packaging	Memo <i>PPP66665</i>	0.00							<i>11/6/29</i>
220 QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.00							<i>MF</i> <i>11-06-29</i>

W/O:		WORK ORDER CHANGES						
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DART AEROSPACE LTD		Work Order:	47792
Description: Skidtube Insert		Part Number:	D3510-041
Inspection Dwg: D3510 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø3.300	+/-0.010	Ø3.309	✓		micr	CNC-05
Ø2.900	+/-0.010	2.939	✓		vern	JF-01
Ø2.750	+/-0.010	2.750	✓		vern	JF-01
R0.25 x 0.066	+/-0.010	Ø2.5 x 0.066	✓		li	
15.00	+/-0.030	15.00	✓		tape	mm.L
0.063 x 45°	+/-0.010 x 0.5°	0.063 x 45°	✓		vern	JF-01
0.125 x 45°	+/-0.010 x 0.5°	0.125 x 45°	✓		vern	JF-01
5.270	+/-0.010	5.271	✓		vh	
3.265	+0.000/-0.010	3.265	✓		micr	CNC-05
30.50	+/-0.030	30.490	✓		tape	mm.L
9.515	+/-0.010	9.516	✓		H-6	31006
6.875	+/-0.010	6.875	✓		"	"
13.750	+/-0.010	13.750	✓		"	"
1.600	+/-0.010	1.600	✓		"	"
2.165	+/-0.010	2.165	✓		"	"
6.735	+/-0.010				"	
2.981	+/-0.010					
2.434	+/-0.010					
4.066	+/-0.010					
Ø0.266	+0.006/-0.001	Ø0.267	✓		Vern	GA-01
Ø0.391	+/-0.010	Ø0.393	✓		"	"
Ø0.516 x 0.100	+/-0.010	Ø0.521 x 0.100	✓		"	"

Measured by: mm.L / B.F.	Audited by: [Signature]	Prototype Approval:	N/A
Date: 11/06/28	Date: 11-06-29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.06.01	New Issue	KJ [Signature]	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

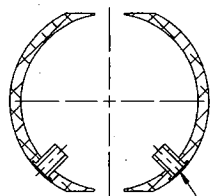
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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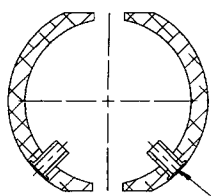
NOTE: Date & initial all entries

D3510-041 SKIDTUBE INSERT



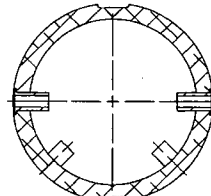
SECTION A-A

AFTER FINISH,
INSTALL AELS-1032-130
(2 PLACES)



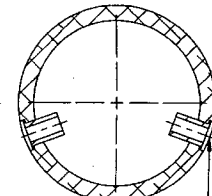
SECTION B-B

AFTER FINISH,
INSTALL AELS-1032-225
(4 PLACES)



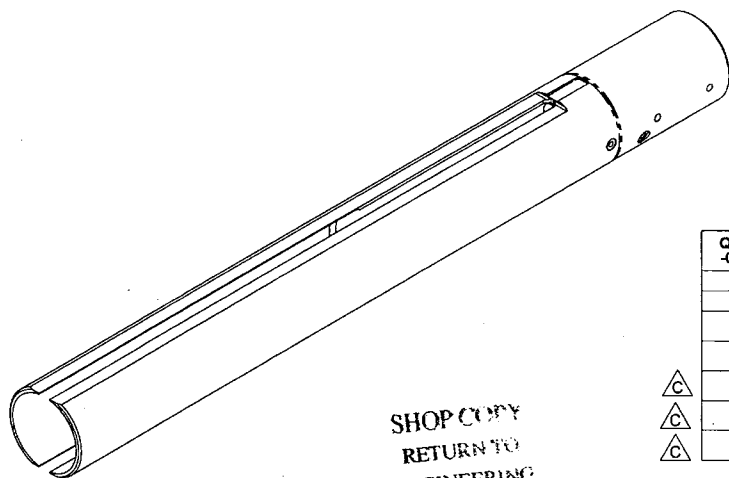
SECTION C-C

AFTER FINISH,
INSTALL AELS-1032-225
(2 PLACES)



SECTION D-D

AFTER FINISH,
INSTALL ALS4-428-165
(2 PLACES)



PARTS LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3510-041	SKIDTUBE INSERT
1	D6016-065	EXTRUSION
2	AELS-1032-130	INSERT
6	AELS-1032-225	INSERT
2	ALS4-428-165	INSERT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *67191* *PH-03-3C*

RELEASED
07-11-16

C	UPDATE DRAWING FORMAT AND CLARITY FOR MFG. CHANGE INSERTS FOR EASE OF INSTALLATION	PH	07.10.04
B	UPDATE DIMENSIONS	PH	06.09.20
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>PH</i>		
DRAWN	<i>PH</i>		
CHECKED	<i>PH</i>		
MFG. APPR.	<i>PH</i>		
APPROVED	<i>PH</i>		
DE APPR.	<i>PH</i>		
DATE	07.10.04		

DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWING NO. D3510	REV. C
TITLE SKIDTUBE INSERT	SCALE 1:3
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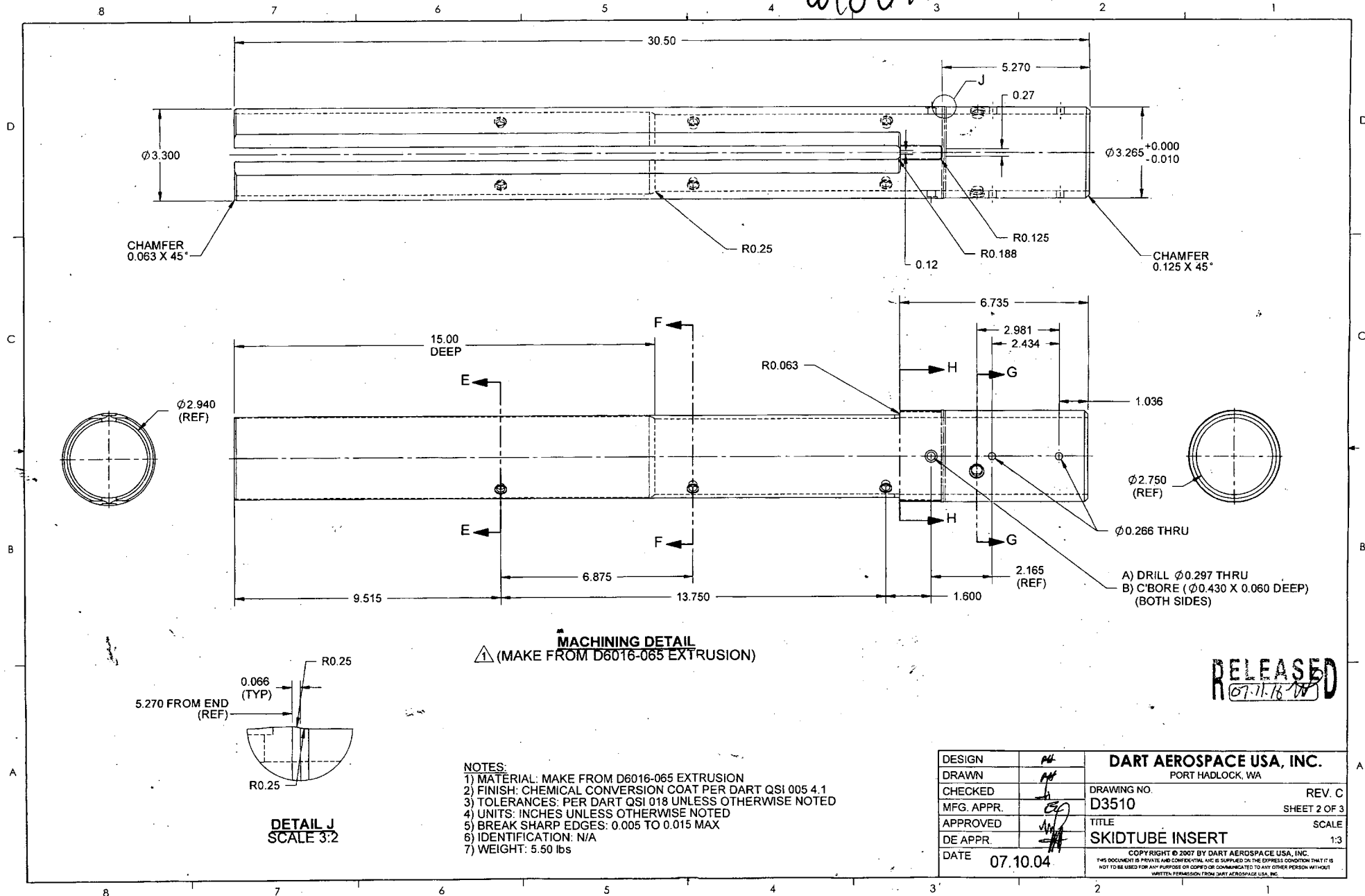
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W/C 6-11-92



RELEASED

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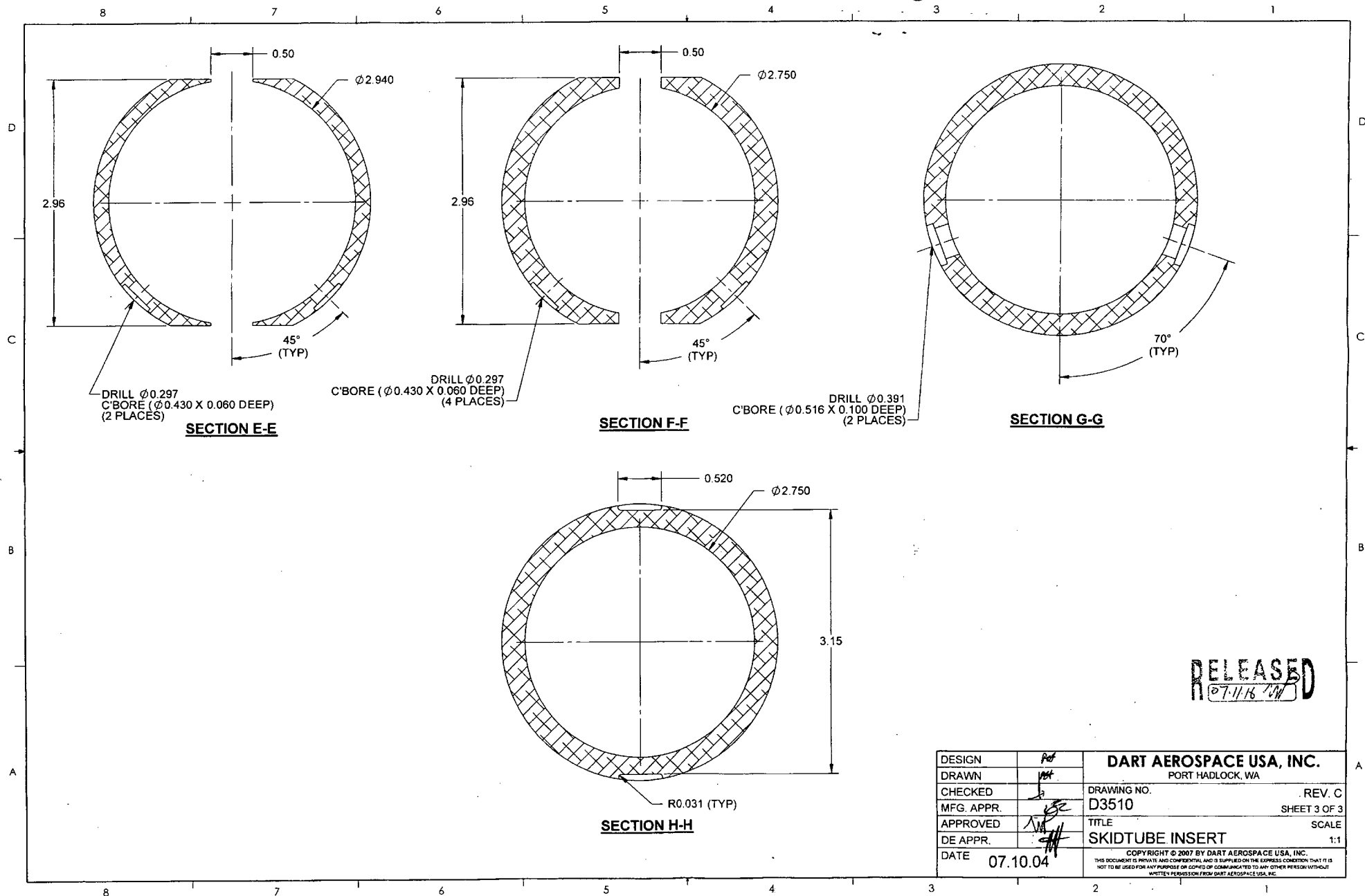
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W667792



RELEASED
07-11-16

DESIGN	Rev	DART AEROSPACE USA, INC.	
DRAWN	Rev	PORT HADLOCK, WA	
CHECKED	Rev	DRAWING NO.	REV. C
MFG. APPR.	Rev	D3510	SHEET 3 OF 3
APPROVED	Rev	TITLE	SCALE
DE APPR.	Rev	SKIDTUBE INSERT	1:1
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